



The Commodification of the Asian Commons: Water as a Property Right

John Sheehan

*Immediate Past President, NSW Division, Australian Property Institute and Chair Project
Advisory Committee, Social and Institutional Research Program (SIRP)*

Abstract

In Asia, the commodification of natural resources such as water has resulted in changes to fundamental understandings of property rights. The interplay between modernity and customary rights to water has brought into stark focus quite different values ascribed to property rights. All these values are nevertheless expressions of worth.

This paper describes how the increasing commodification of the Asian commons, specifically water, has raised issues of regulation and property rights. These issues must be addressed if such natural resources are to be both conserved and sustainably exploited. At a fundamental level the increasing recognition of neophyte property rights in natural resources such as water has led to the notion of property rights in countries such as Thailand and elsewhere, undergoing fundamental change. The outcome of interactions between different forms of institutions of property is only now being dimly understood.

Groundbreaking research by the author into the conceptualisation of water property rights underpins much of this paper, providing possible guideposts for the development of a more appropriate and inclusive approach to such rights.

Keywords

Market reform, property theory, property law and practice, water property rights.

Prior to 1992, all of the above except for the last were subsets of what was known as land property. Unsurprisingly, the appropriateness and resilience of conventional land titling systems³ to deal with these newly emerging property rights has raised fundamental issues rooted in emerging property theory. In addition, archaic rights such as native title have probably been incapable *ab initio* of accommodation within such titling systems. Native title, as stated earlier, has therefore acted as a catalyst for much of the emerging common law property theory.

Property rights require a satisfactory answer to the question of territoriality, whether by placement of an individual property right on the cadastre or on some other form of spatial information vehicle. Some property rights such as biota, native title and water will require the convergence of professional, technical and scientific knowledge and skills residing in the spatial and valuation professions in particular, together with the support of other disciplines such as botany and zoology, anthropology and archaeology, hydrology, and a further broad raft of other sciences.

Conceiving these property rights also requires attention to the twin issues of territoriality (definition) and valuation if these newly emerging rights are to be not just of economic worth but have the status of legal private rights. Yoram Barzel distinguishes economic rights from legal rights in the following manner:

Legal rights are the rights recognised and enforced, in part, by the government. These rights, as a rule, enhance economic rights, but the former are neither necessary nor sufficient for the existence of the latter. A major function of legal rights is to accommodate third-party adjudication and enforcement. In the absence of these safeguards, rights may still be valued, but assets and their exchange must then be self-enforced.⁴

Hence, mere economic rights asserted over natural resources such as water lack the security of legal ownership in much the same manner as squatter communities cannot enforce their economic rights in the same manner as titled legal landowners. However, according to Hernando de Soto⁵ such economic rights are not accidentally “extralegal” but represent a considered response to the inadequacy of existing laws in many developing or postcolonial countries. Yet, according to Chadzimula Molebatsi *et al.*,⁶ the creation of “formal property”⁷ as proposed by de Soto as a way of unlocking “dead capital”⁸ is probably too simplistic

3 The difficulty in accommodating emerging property rights such as water in existing land titling systems is discussed in ACIL Tasman in association with Freehills “An effective system of defining water property titles” (2004) Research Report PR040675 (Land and Water Australia. Canberra).

4 Yoram Barzel *Economic Analysis of Property Rights* (2nd ed, Political Economy of Institutions and Decisions Series, (Cambridge University Press, Cambridge: 1997) 4.

5 Hernando de Soto *The Mystery of Capital* (Black Swan Books, London: 2000) 161.

The Commodification of the Asian Commons

In line with other major global regions, Asian nation states are now addressing the need for increasing commodification of natural resources, such as land, biota (forests) and water. Traditional Asian commons have thus been subject to a creeping commodification, a result of the joint impact of local and international business investment, and the increasing focus by state bureaucracies on natural resources for the broader national benefit.

Larry Lohmann reports that this commodification has resulted in a decline in biological diversity¹² especially in genetic agricultural stock and in the structure and life of soil. Water, which has been a traditional part of village life in many Asian nation states, has been subject to the impact of damming and large scale irrigation schemes.¹³ Forest clearance to permit these developments has also resulted in alternate flooding and droughts, with increasing siltation sometimes quite distant from a particular project. This has resulted in the displacement of traditional village communities.¹⁴ In addition, the introduction of monocultures such as commercial tiger-prawn ponds has had a deleterious effect on local traditional fisheries given that it has been estimated by Lohmann that one half of the Thai mangroves have been removed for commercial aquaculture in ten years.¹⁵

In northern Thailand, traditional wooden dam structures as part of *muang faai*¹⁶ are being replaced by “modern” cement dams leading to increased siltation. They have also:

... torn apart the complex forest/stream/rice field/labour relationships which local villagers have maintained for centuries as an ecological guarantee of subsistence. This has sometimes led to abandonment of the system ...¹⁷

All of the above suggests that commodification of traditional rights and interests in water has occurred in Thailand at a significant cost to traditional owners. Suntariya Muanpawong observes that:

[s]imilar to other nation states, Thailand has gradually transformed the local and possibly collectively-managed natural resources, primarily the forests, into

12 Larry Lohmann “Who Defends Biological Diversity? Conservation Strategies and the Case of Thailand” in Vandana Shiva *et al* (eds) *Biodiversity: Social and Ecological Perspectives* (Zed Books Ltd and World Rainforest Movement, London and Penang: 1995) 78.

13 Ibid at 82.

14 Ibid at 79.

15 Ibid at 80.

16 Traditional Thai irrigation systems.

17 Lohmann, note 13 at 83.

and subsequent national governments are such that traditional property institutions have now decayed and “cannot be artificially resuscitated”. Nevertheless, Chakravarty-Kaul suggests that institutions will have to be “invented and sustained”²⁴ to deal with the current dilution of traditional village rules for the management of common property resources.

Importantly, Chakravarty-Kaul believes that the conceiving of new institutions to deal with natural resources (apart from common lands) will have to accommodate not only village communities but also recognise women as the “most important of these groups”²⁵ which form the traditional management of common property resources.

Unsurprisingly, the foregoing discussion on rights and interests in water has focussed on those communities described as either indigenous or customary. The International Work Group for Indigenous Affairs (IWGIA)²⁶ reported that the total estimated indigenous population of Asia was 148 million, comprising in East Asia 67 million, South Asia 51 million, and South East Asia 30 million. However, the remaining population in Asia far exceeds this total indigenous population, with estimates of the combined population of China and India alone exceeding 2.4 billion persons.²⁷

Given this huge non-indigenous Asian population, indigenous and customary rights and interests in natural resources such as water are arguably of little consequence to nation states. However, as Nicholas Kristof points out “the cost of Asia’s industrial revolution are etched in little hamlets ...”²⁸

He observes that the industrialisation of Asian nations such as China has been at a huge environmental and human health cost, with nearly three million people each year perishing due to the catastrophic impact of polluted air and water which is “some of the filthiest” in “human history”.²⁹ Further, Kristof asserts that this deterioration in environmental quality is “one of the structural flaws in Asia’s economic architecture”.³⁰

As commodification of the commons continues apace in Asia, it is pertinent to note that it has not been without discord. Ole Bruun and Arne Kalland note that:

23 Minoti Chakravarty-Kaul *Common Lands and Customary Law: Institutional Change in North India over the Past Two Centuries* (Oxford University Press, New Delhi: 1996) 275.

24 Ibid.

25 Ibid.

26 Anette Molbech (ed) *The Indigenous World 2000/2001*, (IWGIA Copenhagen: 2001) 22.

27 *The World Guide 2005/2006* (Instituto del Tercer Mundo and New Internationalist Publications, Uruguay/Oxford: 2005) 177, 289.

28 Nicholas Kristof “The Filthy Earth” in Nicholas Kristof and Sheryl Wu Dunn (eds) *Thunder from the East: Portrait of a Rising Asia* (Nicholas Brealey Publishing, London: 2000) 291.

29 Ibid at 295.

30 Ibid.

Arguably, viewing Asia as a homogenous urbanised entity is misleading when considering the issue of commodification of natural resources. The rapid large-scale industrialisation of many Asian nations distorts perceptions of Asian societies which are still undergoing a process of change. Confounding the conventional view of modern Asian societies, Bruun and Kalland point out that Asian nations are “embracing the extremes”, where:

[h]uge world financial centres with highly sophisticated life styles are often surrounded by simple peasant economies, and the growing number of Asian cities with a million-plus inhabitants are often geographically close to vast areas occupied by tribal societies.³⁷

The displacement of traditional Thai village communities by water projects referred to by Lohmann,³⁸ the destruction of Indian communal rights to water described by Shiva,³⁹ and the dilution of north Indian village rules guiding the management of traditional common property resources recounted by Chakravarty-Kaul,⁴⁰ all illustrate the nexus between the extremes in Asian societies. The dichotomy within Asian nations as they attempt to straddle both modernity and tradition underscores the clear and imminent need to establish an understanding of how emerging property rights in natural resources such as water should be constructed to permit legislatures to ensure that economic rights are also legal rights. As Kristof⁴¹ has pointed out, the mismanagement of natural resources such as water is a structural flaw in Asian economies, and is an issue of the greatest importance if Asian nations are to be environmentally sustainable, a critical precursor to sustainable economic development.

Clearly, the globalisation of business investment has had a pervasive influence upon Asian nations as they have attempted to accommodate liberal notions of private property rights, which arguably have their genesis *inter alia* in the *Fifth Amendment*⁴² to the United States Constitution, and the contemporaneous 1789 French Declaration of the Rights of Man and of the Citizen.⁴³ Harvey Jacobs observes that current debate within the American property rights movement, given civil liberty erosion in the aftermath of recent terrorism, focuses on the

37 Bruun and Kalland, note 32 at 7.

38 Lohmann, note 13 at 79.

39 Shiva, note 20 at 12.

40 Chakravarty-Kaul, note 24 at 275.

41 Kristof, note 29 at 295.

42 For a discussion on the *Fifth Amendment* see J.Ely. *The Guardian of Every Other Right: A Constitutional History of Property Rights* Bicentennial Essays on the Bill of Rights (2nd ed. Oxford University Press, New York: 1998).

43 See Article 17 Declaration of the Rights of Man and of the Citizen.

strong argument that property rights are, “a foundational civil liberty, central to the schema of the country’s framers, and guaranteed under the Bill of Rights.”⁴⁴

P. B. Potter⁴⁵ observes that significant dilemmas have arisen in some Asian nations such as China, when attempting to reconcile these notions of fundamental liberal ideals with the local legal culture. A dramatic contrast has been exposed between Chinese law rooted in an authoritarian state structure, that emphasises collective interests over individual identity,⁴⁶ and modern legal constructs of property rights.⁴⁷

Chinese attempts to recognise intellectual property rights held by private individuals reveal how tortured the process of property liberalisation can be, with Potter recording that:

... China has promulgated an impressive array of laws and regulations on intellectual property, including a Trademark Law (1982, revised 1993), a Patent Law (1984, revised 1992), Copyright Law (1991), and a Law Against Unfair Competition Protecting Trade Secrets (1993: Asia Law and Practice, 1998a). In addition the General Principles of Civil Law (arts 94ff) recognise the rights of individuals and legal persons to hold copyrights, patents and trademarks.

The government has also begun to create the bureaucratic infrastructure to enforce these rules through the State Administration for Industry and Commerce (trademark and trade secrets enforcement), the China Patent Office (patent enforcement), and the National Copyright Administration (copyright enforcement).⁴⁸

Such laws protecting the intellectual property rights of private individuals are rooted in the twin needs of “economic development” and “foreign capital and technology,”⁴⁹ and are drawn from the Western tradition of liberal private property. Potter points out that paradoxically, “... the relevant rules and institutions often contradict local culture norms born of the Confucian tradition, which did not generally consider knowledge to be a form of property.”⁵⁰

44 Harvey M. Jacobs “The Politics of Property Rights at the National Level: Signals and Trends” (2003) 69 (Spring) *Journal of the American Planning Association* 185.

45 P. B. Potter “Globalisation and Local Legal Culture: Dilemmas of China’s Use of Liberal Ideals of Private Property Rights” (2000) 2 *Australian Journal of Asian Law* 1–33.

46 Ibid at 9.

47 For a discussion on current developments on the definition of property rights see John Sheehan and Garrick Small *Towards a Definition of Property Rights* Working Paper No 1.02 (UTS Property Research Unit, Faculty of Design, Architecture and Building, University of Technology Sydney, Sydney) (2000).

48 Potter, note 46 at 13.

49 Ibid.

50 Ibid.

Bruun and Kalland state that Western and Asian realities are comparatively similar. It is only in the contrast of ideals that dissimilarities are perceived, especially when “translating elements of Asian cultures”⁵¹ into Western culture. Ideals rooted in Confucian or Western tradition confound the realities shared by Asian and Western societies, and hence attempts to find common ground in property theory. There is a corollary between such dilemmas and the increasing recognition that the financial systems of Asia could be better regulated through a regional more culturally appropriate Asian Monetary Fund (AMF) rather than the US backed International Monetary Fund (IMF) in respect of which Christian Downie notes, “[t]he failure of the IMF to provide any forewarning [of the Asian financial crisis of 1997-1998] represents a glaring deficiency in monitoring and surveillance.”⁵²

Whilst the creation of an AMF “is increasingly likely”,⁵³ a date for its inauguration still remains problematic.⁵⁴ By contrast, the commodification of Asian natural resources continues apace, and the need for a regime of property rights for the various component elements such as water is not only compelling but urgent. However, the voyage of constructing appropriate cultural and legal settings for such property rights risks foundering on the shoals of economic and political expediency, especially in nations such as China, with Potter pointing out:

[t]he absence of deeply entrenched notions about the sanctity of private property is of particular relevance ...

... the general norms of Chinese socialist ideology that restrict private property rights, and does not carry with it the requirement of strict and effective enforcement as a condition for that recognition to be meaningful.⁵⁵

Whilst Asian and Western ideals may differ, Asian perceptions of nature and hence natural resources are also significantly different to the current Western view of nature which according to Bruun and Kalland is:

... in a state of transition, expressed by a propagating ecological awareness and practice: a switch from unbound expansion to a tentative beginning of withdrawal. Concomitantly spreading in the western world is the naturalist view that “our survival lies in the protection of wilderness.”⁵⁶

51 Bruun and Kalland, note 32 above at 21.

52 Christian Downie “An Asian Response to the Asian Crisis: The Proposal for an Asian Monetary Fund” (2004) 54 (December) *Journal of Australian Political Economy* 103.

53 Ibid at 115.

54 Arguably, an AMF will not be successfully created until the People’s Bank of China is able to counter the massive volume of Chinese money-laundering especially in the former Portuguese colony of Macau, and other border areas; see “Enter the Dragon” *The Sydney Morning Herald* 19-20 March 2005 at 45, 48.

55 Potter, note 46 at 14.

Religious and cultural beliefs and practices have little bearing on people utilising natural resources, whereas population density is a critical diagnostic marker for excessive resource utilisation. Low population density results in resource availability and hence unintended resource conservation. Importantly, Bruun and Kalland conclude that in the face of excessive utilisation of natural resources, commodification may assist in possibly ameliorating the situation, stating that:

[o]ver-exploitation of resources is maybe modified by the commoditization of nature, by new disputes over rights to nature, and by the emerging definition of independent rights of nature. Environmental degradation seems in many cases to be more the outcome of a change in power relations than of a collapse of old values.⁶⁶

Given the above discussion on the Asian commons, the following section of this paper briefly addresses the fundamentals of property rights, and especially the notion of the “bundle of rights” that comprises the original concept of land property. Such fundamental notions lie at the core of any attempt to create water property rights in Asia, and arguably should underpin any commodification of Asian natural resources.

Fundamentals of Property Rights

Before attempting to interrogate water property rights, and ascribe worth to the rights and interests therein, it is necessary to understand the “bundle of rights” that comprises what was originally known as land property. Recent research by John Sheehan and Garrick Small⁶⁷ attempts to elucidate what a definition of property rights might look like. However there remains much work to be done in this area as pointed out by the authors:

[t]he increasing recognition of neophyte property rights in natural resources such as water and biota has caused the notion of property rights to undergo fundamental change. As the Anglo-Australian legal system moves closer to an omnibus definition of property rights, this process has already brought forth calls for a titling system for these new “property rights” which are reminiscent of the Certificate of Title issued under the Real Property Act, subject to the inescapable restrictions created by climate and other inherent natural risks.⁶⁸

65 Heffa Schucking and Patrick Anderson “Voices Unheard and Unheeded” in Vandana Shiva *et al* (eds) *Biodiversity: Social and Ecological Perspectives* (Zed Books Ltd and World Rainforest Movement, London and Penang: 1995) 31.

66 Bruun and Kallan, note 32 at 177.

67 John Sheehan and Garrick Small *Towards a Definition of Property Rights* UTS Property Research Unit Working Paper No 1.02 (Faculty of Design Architecture and Building, University of Technology, Sydney) (2002) October.

The construction of a system of private property in water must be embarked upon from the standpoint that such rights must meet a defensible test of what a durable private property right is. If these property rights are to be meaningful to users, purchasers, and especially the banks and financial organisations that will use these rights as collateral for mortgage-based loans, then the test of whether they are property rights is crucial.

In constructing such a test, it is essential to gain an appreciation of existing judicial considerations of the notion of “property”. Starke J in *The Minister of State for the Army v Dalziel* (1944) 68 CLR at 290 (*Dalziel*) indicated that such a definition:

... extends to every species of valuable right and interest including real and personal property, incorporeal hereditaments such as rents and services, rights of way, rights of profit or use in land of another, and chooses in action.

Starke J (at 290) also comments that, “... to acquire any such right is rightly described as an acquisition of property”.

This approach to constructing a definition of “property” has been further strengthened in *Yanner v Eaton* (1999) 201 CLR 351, (*Yanner*), where the Australian High Court took the opportunity to contrast property in the conventional sense with the “property” or “ownership” that the state asserts over natural resources.

The Court stated that:

The word “property” is often used to refer to something that belongs to another ... “property” does not refer to a thing; it is a description of a legal relationship with a thing. It refers to a degree of power that is recognised in law as power permissibly exercised over the thing. The concept of “property” may be elusive. Usually it is treated as a “bundle of rights”.

But even this may have its limits as an analytical tool or accurate description, and it may be ... that “the ultimate fact about property is that it does not really exist; it is mere illusion”.⁷²

Also, the Court usefully stated that the common law position of natural resources was as follows, “At common law there could be no ‘absolute property’, but only ‘qualified property’ in fire, light air, water and wild animals”.⁷³

Nevertheless, as stated earlier in this paper, “property” is generally understood as a titled right to land or to exploit natural resources such as minerals. Commonly these property rights are referred to by the terminology “real estate”, with its emphasis on the immoveable nature of the “property” concerned such as land, buildings and minerals.

⁷² *Yanner* at 8 per Gleeson CJ, Gaudron Kirby and Hayne JJ.

⁷³ *Yanner* at 11.

The range of interests that are classed as “property” while limited only by our imagination, has however been restrained by the Courts of common law in countries that have only recognised a few kinds of interests in land, which are regarded as usual property rights. Some of these rights will be readily recognised such as freehold and leasehold, however a few such as mining rights, fishing rights, and water entitlements have also been recognised.

There has also been the very recent recognition of carbon as a property right, and legislation in various Australian states is developing this concept,⁷⁴ wherein the objective is:

... to provide secure title for carbon sequestration rights through registration on the land title system. The practical effect of this will be that a carbon right attached to property will be held separately from the land ownership, and the carbon right attached to land will be viewable on a property title search, putting the world on notice of the obligations that flow with that land.⁷⁵

The value of carbon credit property rights is currently at Euro 9.50 per ton, a significant increase above the January 2005 price of Euro 7 per ton.⁷⁶ Yet even the conceiving of an exotic property right such as carbon has had unexpected impacts upon customary holders of rights and interests in water, such as in the Waitahuna River in Otago in the South Island of New Zealand, where 114,258 carbon credits (worth around \$A2 million) have resulted from hydro electric generation.

To sustain these carbon credits, the New Zealand energy company needs to pump Waitahuna River headwaters to a distant hydroelectric station in another valley. Apart from the obvious reduction in downstream flows, the removal of water also has unintended repercussions for Maori spiritual and cultural values, as it, “... violates the Maori belief in “mauri”, the vital essence of water, which holds that waters from different valleys should not be mixed”.⁷⁷

The final section of this paper will address some fundamental issues arising from the increasing recognition of water property rights.

74 Jacqueline Bredhauer “Tree Clearing in Western Queensland — a Cost Benefit Analysis of Carbon Sequestration” (2000) 17 *Environmental and Planning Law Journal* 389.

75 Ibid.

76 “Kyoto’s Threat to the Essence of Mauri” *Sydney Morning Herald* 30 March 2005 at 13.

77 Ibid.

Concluding Remarks

The establishment of new forms of specific private property rights such as water has highlighted the need to recognise the impact of isolating these rights from the “bundle of rights” currently residing within the accepted notion of land ownership. It is instructive that this issue is currently being canvassed in the contentious area of carbon credit property rights.⁷⁸ There is growing recognition of an interconnectedness between these less familiar forms of property and even archaic property rights such as native title,⁷⁹ and the prospect for conflict in some circumstances.⁸⁰

All of the above illustrates the difficulties likely to be encountered when the need for security and tradeability of a property right such as water, impact upon broader socio-economic matters, such as established property markets, financial regulation, and natural resources management issues.

Nevertheless, a common feature of current property rights is that the interests in question are territorial, in so much as the right is contained only within defined boundaries. This is commonly achieved by way of a legal description of the boundaries, which have been defined by means of a cadastre. In addition, these rights are also proscribed in so far as what activities can occur within the territory,⁸¹ the manner in which the right is to be paid for, and other obligations incurred or limitations imposed.

Some of these usual property rights can be acquired outright, while some such as fishing rights and water entitlements may be attached to rights that are or were once held in a parcel of land adjacent or nearby.

Whilst water property rights are capable of construction within common law or Civil Law regimes, an intellectual quantum leap remains to understand how existing property law will interface with property theory in the context of water. This interface lies somewhere between these boundaries, and if true property rights in water are to emerge the positioning of this interface is of critical importance. The commodification of natural resources such as water has been urged by commercial demand. However while such matters are important they should not overshadow the need for an appropriate balance in conceiving property rights in water.

78 For a detailed discussion on property rights in carbon see Jacqueline Bredhauer “Tree Clearing in Western Queensland — a Cost Benefit Analysis of Carbon Sequestration” (2000) 17 *Environmental and Planning Law Journal* 383–405.

79 Michael Davis “Indigenous Rights in Traditional Knowledge and Biological Diversity: Approaches to Protection,” (1999) 4 *Australian Indigenous Law Reporter* 1–32.

80 James Woodford “Hunters and Protectors” *The Sydney Morning Herald* 6–7 December 2003 at 4s, 5s.

81 Donald Denman “Recognising the property right” (1981) 67 *The Planner* 161.